

**Claims**

1. A method for preparing closed bacterial ghosts,  
comprising bringing bacterial ghosts into contact  
5 with carrier materials under conditions under which  
closure of the bacterial ghosts takes place,  
**characterized in that**  
the fusion is mediated by way of specific  
interactions between the partners of a bioaffinity  
10 binding pair, which partners are anchored on the  
ghosts and/or the carrier materials.
2. The method as claimed in claim 1,  
**characterized in that**  
15 the partners of the bioaffinity binding pair are  
selected from the group consisting of biotin or  
biotin analogues/streptavidin or avidin, hapten/  
antibodies or antibody fragments, saccharide/lectin  
and ligand/receptor.  
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3. The method as claimed in claim 2,  
**characterized in that**  
the bioaffinity binding pair employed is  
biotin/streptavidin.  
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4. The method as claimed in one of claims 1 to 3,  
**characterized in that**  
at least one partner of the bioaffinity binding pair  
is immobilized on the membrane of the bacterial  
30. ghosts and on the carrier material.
5. The method as claimed in claim 4,  
**characterized in that**  
a first partner (P1) of the bioaffinity binding pair  
35 is immobilized on the membrane of the bacterial  
ghosts and a second partner (P2) of the bioaffinity  
binding pair is immobilized on the carrier material  
and the closure takes place by way of a P1-P2  
interaction.

6. The method as claimed in claim 4,  
**characterized in that**  
a first partner (P1) of the bioaffinity binding pair  
is immobilized on the membrane of the bacterial  
ghosts and the carrier material and a second partner  
(P2) of the bioaffinity binding pair is present in  
free form and the closure takes place by way of a P1-  
P2-P1 interaction.
7. The method as claimed in one of the preceding claims,  
**characterized in that**  
the ghosts are derived from Gram-negative bacteria.
8. The method as claimed in one of the preceding claims,  
**characterized in that**  
the ghosts are derived from recombinant bacteria  
containing heterologous membrane polypeptides.
9. The method as claimed in one of the preceding claims,  
**characterized in that**  
the carrier material employed is lipid vesicles.
10. The method as claimed in claim 9,  
**characterized in that**  
the lipid vesicles employed are vesicles from  
homogenized cells, in particular bacterial cells,  
liposomes or membrane-enveloped viruses.
11. The method as claimed in claim 9 or 10, furthermore  
comprising an at least partial fusion of the membrane  
of the bacterial ghosts and the membrane of the lipid  
vesicles.
12. The method as claimed in one of the preceding claims,  
further comprising the packing of active compounds  
into the bacterial ghosts.
13. The method as claimed in claim 12,

**characterized in that**

the active compounds are selected from genetic material, cell components, substances, labeling substances, agriculturally active substances, dyes and combinations thereof.

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14. A closed bacterial ghost which can be obtained by the method as claimed in one of claims 1 to 13, with the closure being mediated by way of specific interactions between partners of a bioaffinity binding pair.
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15. The closed bacterial ghost as claimed in claim 14,  
**characterized in that**  
15 it comprises a membrane which is at least partially intact.
16. The closed bacterial ghost as claimed in claim 14 or 15,  
20 **characterized in that**  
it comprises at least one encapsulated active compound.
17. The use of closed bacterial ghosts as claimed in one of claims 14 to 16 in medicine.
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18. The use of closed bacterial ghosts as claimed in one of claims 14 to 16 in the agricultural sphere.
- 30 19. The use of closed bacterial ghosts as claimed in one of claims 14 to 16 in biotechnology.